DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-027604

Address: 333 Burma Road **Date Inspected:** 15-May-2012

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV Contractor: American Bridge/Fluor Enterprises, a JV **Location:** Job Site

CWI Name: CWI Present: Yes No As noted below. **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component: Tower Component**

Summary of Items Observed:

Quality Assurance Inspector (QA) William Clifford was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

In Process Visual Inspection

Tower

This QA observed, at random intervals, ABF/JV qualified welder Richard Garcia #5892 performing Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018H4R electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1001-Repair. The joint being welded was tower shear plate designated as ESW weld, location "P" from face "A".

Dimensions excavated for this repair were: (Y=100mm, I=660mm, W=67mm, D=52mm)

During welding, ABF Quality Control (QC) John Pagliero was noted monitoring the welding parameters. Welding parameters were recorded as (A=155).

Electroslag Weld Excavations

This QA randomly observed ABF/JV welding personnel performing excavation of welds previously Ultrasonic Testing (UT) rejected. Quality Control (QC) Inspector John Pagliero performed Magnetic Particle (MT) and visual confirmation of excavations.

Excavations were recorded as follows:

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Weld "F" - Y=8170mm, L=270mm, W=35mm, D=31mm

Weld "F" - Y=4710mm, L=250mm, W=20mm, D=15mm

Magnetic Particle Testing

This QA Inspector performed Magnetic Particle Testing (MT) of weld repair excavations on two locations on tower ESW "F". This QA observed no rejectable indications at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

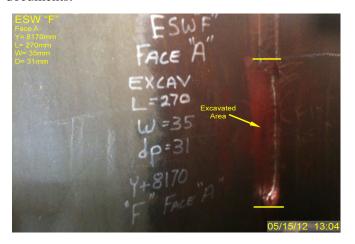
Excavated area locations are:

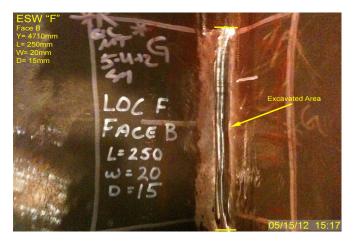
Y= 8170mm, 270mm, 35mm, and 31mm.

Y= 4710mm, 250mm, 20mm, and 15mm.

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the root pass weld at "Weld #110". This root pass weld was previously accepted by QC Magnetic Particle technicians. This QA observed no rejectable indications at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:

Clifford, William

Quality Assurance Inspector

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Reviewed By: Levell,Bill QA Reviewer